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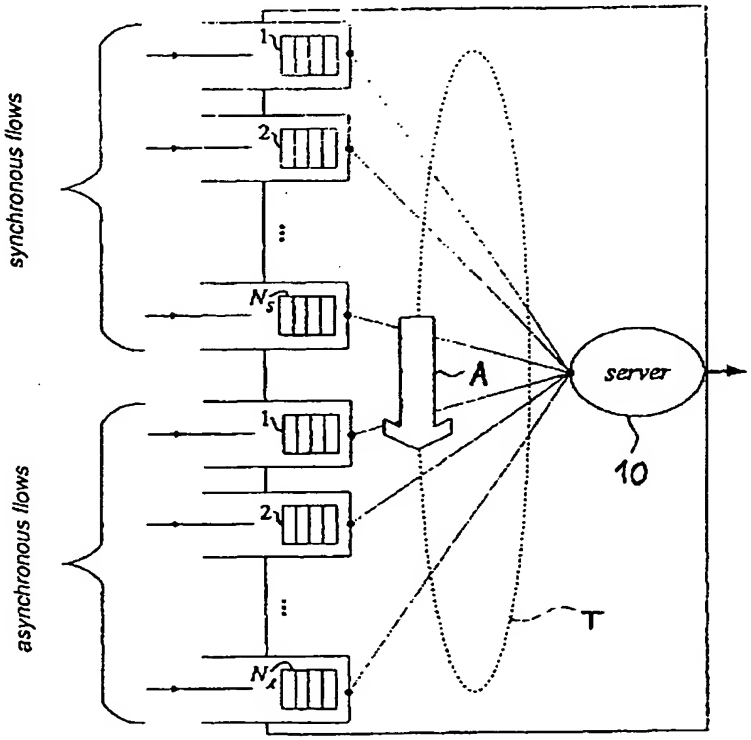
(54) Title: SCHEDULING A SHARED RESOURCE AMONG SYNCHRONOUS AND ASYNCHRONOUS PACKET FLOWS



(57) Abstract: Each synchronous flow (i=1, 2, ..., N_S) is associated to a respective synchronous capacity value (H_i) that is related the period of time for which a synchronous flow can be serviced before the server moves on. This value can be selected either according to a local allocation criteria or according to a global allocation criteria. Each asynchronous flow (i=1, 2, ..., N_A) s is associated to a respective first value indicating the delay to be made up so that the respective queue has the right to be serviced and to another value indicating the instant in which the server visited the respective queue in the previous cycle. Each queue associated to a synchronous flow (h) is then serviced for a period of time that is related to be aforesaid synchronous capacity value, while each queue associated to an asynchronous flow (i) is serviced only if the server's visit occurs before the expected moment. The server's visit (10) to the synchronous queues should preferably take place during two successive cycles in order to optimise the use of the resources available.

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